## REMARKS

Please note that since March 12, 2006, was a Sunday, this paper is being timely filed on Monday March 13, 2006, the following business day.

Claims 1-13 were pending in the instant application at the time of the outstanding Office Action in which the claims were rejected and the rejection made final. Applicants would like to note a telephone interview was conducted on February 13, 2006, in which one of the named inventors partook. During this interview the applied references and the pending claims were discussed. No agreement, however, was reached regarding the withdrawal of the present rejections. A second telephone interview was held on Thursday March 9, 2006, with Applicants' counsel and the Examiner during which the most expeditious procedure for responding to the outstanding Office Action was discussed. It was suggested that the best practice would be the submission of an amendment in combination with a request for continued examination (RCE) thereby permitting the Office the opportunity to conduct another search with respect to any amended claims. Applicants are, therefore, submitting an RCE request herewith.

Claims 1, 7, and 13 are independent claims; the remaining claims are dependent claims. Claims 1, 4-7, and 10-13 stand rejected under 35 USC 102(b) as being anticipated by Wantanabe et al. ("Wantanabe"). Claims 2 and 8 stand rejected under 35 USC 103(a) as being unpatentable over Watanabe in view of Chittineni et al. ("Chittineni"). Finally, claims 3 and 9 stand rejected under 35 USC 103(a) as being unpatentable over Watanabe in view of Guorong et al. ("Guorong"). The Office is

respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

Presently, the independent claims have been rewritten; claims 14-18 are newly added dependent claims directed toward further novel aspects of the present invention. Claims 3 and 9 have been cancelled. Claim 1 is illustrative of the amendments to the independent claims and now recites, *inter alia*, "[s]aid minimizing step comprising: developing an objective function; and optimizing the objective function through gradient descent, wherein said minimizing step is performed non-incrementally." (Claim 1)(emphasis added) It should be understood the Applicants intend no change in the scope of the claims by the changes made by these amendments. Also, these amendments are not in acquiescence of the Office's position on allowability, but instead made merely to expedite prosecution.

As best understood, Watanabe relates generally to a "Signal Pattern Recognition Apparatus Comprising Parameter Training Controller for Training Feature Conversion Parameters and Discriminant Functions." (Title) Chittineni, as best understood, appears to be directed toward "[t]he problem of maximization of the divergence between a pair of unequal mean and unequal covariance matrix Gaussian distributed pattern classes." (Abstract) However, neither reference teaches or suggests minimizing the probability of subsequent misclassification non-incrementally. While the Office has taken the position that Chittineni provides maximizing a divergence, Applicants' respectfully submit any maximization performed in Chittineni is sequential or incremental in nature. Because neither Watanabe nor Chittineni teach or suggest the minimization and optimization of an

objective function "wherein said minimizing step is performed non-incrementally" neither reference anticipates the independent claims, since "[a] claim is anticipated only if each and every element as set forth in the claim is found...". *E.g.*, *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Moreover, Applicants also submit the combination of Watanabe and Chittineni in support of a 35 U.S.C. 103 rejection would also be improper because the amended claims, as discussed above, are not taught or suggested to one skilled in the art in light of the references. As the Examiner is aware, one of the essential requirements for establishing a *prima facie* case of obviousness is that the references, either alone or in combination, must teach or suggest to one skilled in the art all of the limitations of an invention as expressed by the claims under consideration. In this instance the art simply fails to teach all the limitations set forth in the independent claims. Therefore, the Applicants respectfully request the withdrawal of the present rejections.

Finally, the Applicants would also like to note the inclusion of four new claims, specifically claims 14 -18, which are fully supported by the Applicants' disclosure and are directed to further novel aspects of at least one embodiment of the present invention. It is, therefore, submitted said claims are immediately allowable.

In view of the foregoing, it is respectfully submitted that independent claims 1, 7 and 13 fully distinguish over the applied art and are thus allowable. By virtue of dependence from what are believed to be allowable independent claims 1, 7 and 13, it is respectfully submitted that claims 2, 4-6, 8, 10-12, and 14-18 are also allowable.

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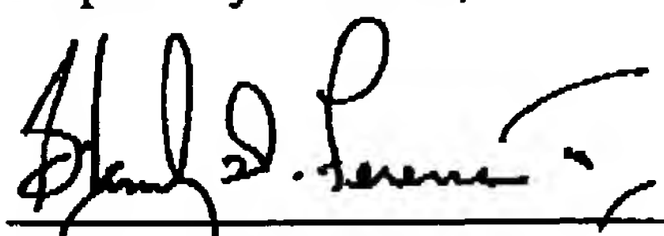
(590.022)

In summary, it is respectfully submitted that the instant application, including claims 1, 2, 4-6, 8, and 10-18, is in condition for allowance. Notice to the effect is hereby earnestly solicited.

Respectfully submitted,



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